

tarsal tubercle; subarticular tubercles moderate. The tibio-tarsal articulation reaches the tip of the snout or a little beyond. Skin smooth or with small warts above, granular beneath; a strong curved fold above the tympanum; heel sometimes with a small conical tubercle. Grey, olive, or reddish brown above, uniform or marbled with darker or with large insuliform spots; a light line may run along the canthus rostralis and supraciliary edge; dirty white or brown beneath. Male with an external subgular vocal sac.

From snout to vent 66 millim.

Several specimens.

EXPLANATION OF THE PLATES.

PLATE I.

Fig. 1. *Lygosoma nigrolineatum*.

Fig. 2. *Lygosoma Stanleyanum*.

Fig. 3. *Lygosoma elegans*.

Fig. 4. *Lygosoma iridescens*.

Fig. 5. *Nyctimantis papua*.

Fig. 5 a. Ditto. Open mouth.

PLATE II.

Fig. 1. *Sphenophryne Anthonyi*.

Fig. 2. *Liophryne rhododactyla*.

Fig. 2 a. Ditto. Palate.

Fig. 2 b. Ditto. Tongue.

Fig. 3. *Mantophryne lateralis*.

III.—*Descriptions of Four new Species of Lycænidaë from the Eastern Archipelago.* By HAMILTON H. DRUCE, F.Z.S., F.E.S.

Thysonotis lampros, sp. n.

♂. Upperside allied to *T. philostratus*, Feld., which it resembles in colour, but the fore wing is entirely without the white discal band, and has a somewhat wider black outer margin, which is less distinctly defined on its inner edge. The hind wing differs from that of *T. philostratus* by the blue area being rather more extensive. The cilia of both wings (which in *T. philostratus* are black) are white, those of the hind wing slightly marked with black at the termination of the nervules. The underside differs from that species by the white band being usually narrower, and in the hind wing always straighter, not so curved in towards the base of the wing where it reaches the abdominal margin. The

bluish-green costal streak of the fore wing reaches closer to the apex before it rounds off along the outer margin, consequently the apex is less broadly black than in *T. philostratus*. The blue submarginal band on the hind wing is wider and its central black spots are more elongate. Cilia of both wings as above. Thorax and abdomen concolorous with wings.

♀. Upperside almost entirely blackish brown, with but a faint indication of a narrow pale band, which ends in a small creamy white patch on the abdominal margin, close to the base, after it crosses the submedian nervure. Cilia as in male. On the underside it differs from the male by the white band being narrower, and consequently the black areas being more extensive, and by the submarginal blue band of the hind wing being wider and containing still more elongate deep black spots. Some specimens have on the fore wing, between the blue band and the outer margin, a narrow whitish band from near the apex to the outer angle interrupted by the brown nervules.

Expanse, ♂ $1\frac{4}{5}$ – $2\frac{1}{5}$ inches; ♀ $1\frac{7}{10}$ to $2\frac{1}{5}$ inches.

Hab. Kiriwini, Trobriand Is., March to May (*A. S. Meek*).

Types Mus. Druce.

At first I thought that this species might be nearest to *T. regina*, Kirby, from Normanby I., but on examining the type of that species I find that it is allied in coloration to *T. apollonius*, Feld., which is entirely different from *T. philostratus*.

T. lampros is the only species of this group which has entirely lost the white band on the fore wing above, and the female is much duller than any other described. Mr. Meek obtained many specimens, which scarcely vary except in size.

PHILIRIS, Röber.

Herr Röber has made Felder's *Thecla ilias* from Amboyna the type of his genus.

It may perhaps be found convenient to retain Hübner's name *Candalides* (the first name mentioned under this heading being *xanthospilos*, Hübner, from Australia) for some species of this group, as I find that the 3rd subcostal nervule varies considerably in length.

Of the species described here, *P. theleos* has this nervule comparatively long as in *P. ilias*, whilst *P. speirion* and *P. mneia* have it comparatively short as in *P. philotus*.

Holochila absimilis, Feld., and its allies have it comparatively long, but the name *Holochila* cannot be used, as it is preoccupied.

Philiris theleos, sp. n.

♂. Upperside closely allied to *P. ilias*, Feld. Blue colour rather darker and more glistening; apex and outer margin of fore wing distinctly broader, black-bordered. Outer margin of hind wing, which in *P. ilias* is almost linear, distinctly and evenly black-bordered as in fore wing. Cilia whitish, with black at the ends of the nervules, but less conspicuous than in *P. ilias*. Underside differs from *P. ilias* by being a pale brownish white in place of pure white. Antennæ black with white spots. Abdomen black above, pale below.

Expanse $1\frac{3}{10}$ inch.

Hab. Amboyna, February (*Doherty*).

Type Mus. Druce.

This species has the outer margin of the fore wing nearly straight as in *P. ilias*.

Philiris speirion, sp. n.

♂. Allied to *P. philotus*, Feld.: upperside a much brighter and bluer shade of purple, with the black borders to both wings rather more than twice as broad, and the white cilia more conspicuous and less distinctly spotted with black at the terminations of the nervules. Underside as in *P. philotus*.

♀. Upperside: both wings pale shining cærulean blue, much the colour of *P. philotus*, ♀, but more brilliant, with broad blackish-brown margins. Cilia grey. Underside as male, but paler.

Expanse, ♂ ♀ $1\frac{2}{5}$ inch.

Hab. Fergusson I., September to December (*A. S. Meek*).

Types Mus. Druce.

Mr. Meek obtained many specimens which do not appear to vary.

It seems to be a very distinct form, and the female is, I believe, the first one of this genus described which has the conspicuous blue area of almost equal extent in both wings.

This insect, together with the next described, has the outer margin of the fore wing in the male distinctly convex, as in *P. philotus*. There appears to be a patch of darkened scales in the cell of the fore wing in *P. philotus*, but I can find no trace of this in *P. speirion*.

Philiris mneia, sp. n.

♂. Upperside uniform dark purplish brown; cilia greyish. Underside differs only from *P. philotus* by being of a more reddish-brown shade and by the unmarked cilia.

♀. Upperside dull deep brownish black; cilia of fore wing brownish, of hind wing white, with black spots at the termi-

nations of the nervules. Underside paler than male, with the cilia of the fore wing black, of hind wing white, with large black spots at the termination of the nervules, and with an anteciliary black line.

Expanse, ♂ $1\frac{2}{5}$ inch; ♂ $1\frac{1}{2}$ – $1\frac{3}{5}$ inch.

Hab. Batchian, March (*W. Doherty*).

Some female specimens have a few blue scales dusted on the disc of the fore wing above.

This species has long been in collections, but I have nowhere seen it described.

IV.—*Contributions from the New Mexico Biological Station.*
 —No. 2. *On a Collection of Diptera from the Lowlands of the Rio Nautla, in the State of Vera Cruz.* I. By C. H. TYLER TOWNSEND, F.E.S.

THE following Diptera were all collected by the writer, in March, April, June, and July, at San Rafael and Paso de Telaya, on the Rio Nautla, about a mile below and above Jicaltepec, but on the opposite or north side of the river. Paso de Telaya is but two miles from San Rafael, and really forms a part of that settlement. This locality is about four or five miles inland from the coast, and about 30 or 40 feet above sea-level.

Many of the Diptera in this collection were taken, from June 26 to July 19, at San Rafael, on flowers of two closely approximated patches of a shrub known by the native name of *barra negra*. It has been determined by Dr. J. N. Rose as *Cordia* sp., probably *C. ferruginea*. Although the flowers of this shrub are small, whitish, and inconspicuous, they were visited by many flies, bees, and other insects. They were about the only flowers in the vicinity from the last of June through July.

A word may be said about the seasons which prevailed during the period of my collecting. There were occasional northers, accompanied by rain, through March and April. No rain fell through May, and not until about June 14, it thus having become very dry, when there came a good rain which lasted two days. After this no more rain fell till July 12, when it rained hard, and continued to rain, some in nearly every twenty-four hours, up to July 20, when I left.

The Lower Rio Nautla region possesses many temperate forms of insects, and therefore comes well within the limits of the *Tamaulipan* fauna. Probably its temperate forms fall short of 25 per cent. of the whole fauna. It is of course,